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PROJECT TITLE : PILOT-PLANT OPERATIONS

PERIOD COVERED : MAY 25 - JUNE 19 1981

WRITTEN BY : Lüthi-N. (NIL)

## 1. EQUIPMENT

### 1.1. Extract Clean-up

A rented Sweco vibrator has been tested for cleaning up the extract at the outlet of the extractor.

Trials are underway where the extract is sieved in two stages: first through a screen of 200, and then through a screen of 270 mesh.

#### 1.2. Rotocell Extractor

After a short period of continuous extraction of the strips at a feedwater temperature of  $80^{\circ}\text{C}$ , nitrite was found in the extract. The same phenomenon was also observed during continuous extraction at a temperature of  $20^{\circ}\text{C}$ . To prevent this transformation of the extract, we are now trying to reduce the residence time of the extract in the Rotocell extractor.

# 1.3. Sterilization Line of the Extract

The turbine of the pump of the sterilization line was found to be strongly corroded. It appears that the liquid used to clean the lines was too harsh for the stainless steel of which the turbine is made.

Fortunately the stainless steel of the rest of the line is of better quality.

Therefore only the turbine had to be replaced.

# 1.4. Fermenter

Some problems were observed with the automatic pH regulator. It was sent to the supplier for servicing. In the meantime we are using the pH regulator of the 20-1 fermenter.

The automatic anti-foam injection system works badly from time to time and will have to be checked.

Trials to test the sterility of the sterilization lines of both the extract and the ingredients, as well as of the fermenter, were continued.

Unfortunately infections were still found in the lines as well as in the fermenter. These problems will be followed up.

U. Will

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